

## **RAW SEQUENCE LISTING**

**The Biotechnology Systems Branch of the Scientific and Technical  
Information Center (STIC) no errors detected.**

Application Serial Number: 10/597,945A  
Source: TFWO  
Date Processed by STIC: 03/23/2007

# ***ENTERED***



IFWO

## RAW SEQUENCE LISTING

DATE: 03/23/2007

PATENT APPLICATION: US/10/597,945A

TIME: 14:47:40

Input Set : N:\efs\03\_23\_07\10597945a\_efs\58049-00035\_Substitute\_SL.txt

Output Set: N:\CRF4\03232007\J597945A.raw

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2 <110> APPLICANT: Korea Research Institute of Bioscience and Biotechnology
3     KWAK, Sang-Soo
4     KWON, Suk-Yoon
5     LEE, Haeng-Soon
6     RYU, Sun-Hwa
8 <120> TITLE OF INVENTION: Multiple stress-inducible peroxidase promoter derived from
9     Ipomoea batatas
11 <130> FILE REFERENCE: 58049-00035
13 <140> CURRENT APPLICATION NUMBER: US 10/597,945A
14 <141> CURRENT FILING DATE: 2006-08-11
16 <150> PRIOR APPLICATION NUMBER: PCT/KR2004/000381
17 <151> PRIOR FILING DATE: 2004-02-24
19 <160> NUMBER OF SEQ ID NOS: 30
21 <170> SOFTWARE: KopatentIn 1.71
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24 <211> LENGTH: 1512
25 <212> TYPE: DNA
26 <213> ORGANISM: Ipomoea batatas
28 <400> SEQUENCE: 1
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31 ggcttctcca tttaccagaa tacccataca gccatgaaag ggcagcttaa gtcaccccca      120
33 aagtggctgc tagacaacac tctagagtcg tcagtggccg acgtgctctc actacgccta      180
35 ggcattctcc cgggcaagct ttccgacgaa gactgcatat tctccgccgt taaggaagtg      240
37 gtggacgccc ccattgatgc agaaacccgc atgggtgctt ccctcattcg cctcttcttc      300
39 catgactgct ttgttgatgt acgtacgcta attttgtacg atgatgtttt tttttttttt      360
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43 gtattatctg cagggttggt acgcaggtct tctactaaac gatacaccta ctttcaccgg      480
45 agaacagacc gccggcggca ataataactc agtcagaggt tttgaggtga tacaacaagc      540
47 taaagagaat gtgataacca aatgtcccta catacaagta tcttggtgccg acatcttatc      600
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57 aagaacggcg aaccttaccg gagctaacac ccaactcgtc ggaccaaacg aggaattggc      900
59 atcgcaagtc gagaaatttg cggcgaaagg gttctccgaa acggagctag tcgccttggt      960
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69 cgttaggagg tacagggacg agatggacgc ttttctcgcc gatttcgccg ccgccatggt      1260
71 gaagatgagc ctctcgccgc cgtcccccgg agtggagctc gaaatccgag aggtttgcag      1320
73 cgaggtgaat gccaacacag ttgcattccat gtgaagttcg ttcccatcga catcaataac      1380
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79 ataaatttgt ta 1512
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83 <211> LENGTH: 110
84 <212> TYPE: DNA
85 <213> ORGANISM: Ipomoea batatas
87 <220> FEATURE:
88 <221> NAME/KEY: promoter
89 <222> LOCATION: (1)..(110)
90 <223> OTHER INFORMATION: -110 deletion promoter
93 <400> SEQUENCE: 2
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96 tcgaccactc attttcttct catacttcct ttgctgtgat aatcatcatc 110
99 <210> SEQ ID NO: 3
100 <211> LENGTH: 177
101 <212> TYPE: DNA
102 <213> ORGANISM: Ipomoea batatas
104 <220> FEATURE:
105 <221> NAME/KEY: promoter
106 <222> LOCATION: (1)..(177)
107 <223> OTHER INFORMATION: -177 deletion promoter
110 <400> SEQUENCE: 3
111 aaattaaatc tcagtttgct ttattatatt attatcaaca ataataattt aatactgatc 60
113 gaagaacttt ccctttcaag ttctctatct aaggaagcct gagaagccat taatcctcat 120
115 catcagctcg accactcatt tcttcttcat acttcctttg ctgtgataat catcatc 177
118 <210> SEQ ID NO: 4
119 <211> LENGTH: 306
120 <212> TYPE: DNA
121 <213> ORGANISM: Ipomoea batatas
123 <220> FEATURE:
124 <221> NAME/KEY: promoter
125 <222> LOCATION: (1)..(306)
126 <223> OTHER INFORMATION: -306 deletion promoter
129 <400> SEQUENCE: 4
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132 aaatagtact ccaatcataa taaattatct tatattatat tgccaacaat taaaaattca 120
134 aattagaaca aattaaatct cagtttgctt tattatatta ttatcaacaa taataattta 180
136 atactgatcg aagaactttc cttttcaagt tctctattta aggaagcctg agaagccatt 240
138 aatcctcatc atcagctcga ccaatcattt cttcttcata cttcctttgc tgtgataatc 300
140 atcatc 306
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144 <211> LENGTH: 366
145 <212> TYPE: DNA
146 <213> ORGANISM: Ipomoea batatas
148 <220> FEATURE:
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150 <222> LOCATION: (1)..(366)
151 <223> OTHER INFORMATION: -366 deletion promoter
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157 taagggtgtt tatcgtggca gcatgagtcg atgacaaacg catatattat tattaaaaca      120
159 aaatagtact ccaatcataa taaattatct tatattatat tgccaacaat taaaaattca      180
161 aattagaaca aattaaatct cagtttgctt tattatatta ttatcaacaa taataattta      240
163 atactgatcg aagaactttc cttttcaagt tctctattta aggaagcctg agaagccatt      300
165 aatcctcatc atcagctcga ccactcattt cttcttcata cttcctttgc tgtgataatc      360
167 atcatc                                         366.
170 <210> SEQ ID NO: 6
171 <211> LENGTH: 433
172 <212> TYPE: DNA
173 <213> ORGANISM: Ipomoea batatas
175 <220> FEATURE:
176 <221> NAME/KEY: promoter
177 <222> LOCATION: (1)..(433)
178 <223> OTHER INFORMATION: -433 deletion promoter
181 <400> SEQUENCE: 6
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184 gttagattag tataatgaaa taaagttaat cattctctat atttgatgat ggtaattagt      120
186 atcatggtaa ggtgttttat cgtggcagca tgagtgcagc acaaacgcac atattattat      180
188 taaaacaaaa tagtactcca atcataataa attatcttat attatattgc caacaattaa      240
190 aaattcaaat tagaacaagt taaatctcag ttgtctttat tatattatta tcaacaataa      300
192 taattttaata ctgatcgaag aactttccct ttcaagttct ctatttaagg aagcctgaga      360
194 agccattaat cctcatcatc agctcgacca ctcatctctt cttcatactt cttttgctgt      420
196 gataatcatc atc                                         433
199 <210> SEQ ID NO: 7
200 <211> LENGTH: 818
201 <212> TYPE: DNA
202 <213> ORGANISM: Ipomoea batatas
204 <220> FEATURE:
205 <221> NAME/KEY: promoter
206 <222> LOCATION: (1)..(818)
207 <223> OTHER INFORMATION: -818 deletion promoter
210 <400> SEQUENCE: 7
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213 gaagttccat ctatggaaat aacggattat ttatctaatt ttcaaattct atatatatag      120
215 tctcgagtgg aacaaaaata gaactaattt gaacaaatca aagtctaaga aaataatata      180
217 tgcttttagc gcaaaaaataa gaatggtagt atacttaatc ctcatcatag tcttcaaccc      240
219 tgcatatagc acacttaaca ttttatattc aaatatactt taatttagtc atgataatac      300
221 aactcaccta ctccattata gccgataata caactcacct agctactcca ttatagtcca      360
223 acaatatcaa atgaataaaa tagtaatggt gacttaaagg gctgaatcca acatatattc      420
225 tgacatttaa aaatgctaac gtacggttag attagtataa tgaaataaag ttaatcatc      480
227 tctatatttg atgatggtaa ttagtatcat ggtaagggtg ttatcgtgg cagcatgagt      540
229 gcatgacaaa cgcatatatt attattaaaa caaatagta ctccaatcat aataaattat      600
231 cttatattat attgccaaca attaaaaatt caaatagaa caaataaat ctcagtttgc      660
233 tttattatat tattatcaac aataataatt taactactgt cgaagaactt tccctttcaa      720
235 gttctctatt taaggaagcc tgagaagcca ttaatcctca tcatcagctc gaccactcat      780
237 ttcttcttca tacttctttt gctgtgataa tcatcatc                                         818
240 <210> SEQ ID NO: 8
241 <211> LENGTH: 1199

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243 <213> ORGANISM: Ipomoea batatas
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247 <222> LOCATION: (1)..(1199)
248 <223> OTHER INFORMATION: -1199 deletion promoter
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254 acttttgtaa aaaatttgat tttttttttt gatgaattca tatactccaa agattttcct      120
256 catttaatta aatttctatc ctcatgttga acccattaat cgaataattg acatattaga      180
258 taaacttagc catcatatga catttgatca tgattgatga tttttaaaaa ataaaaacaa      240
260 aattatgaaa gggtaatgaa atattttaaa aaaattatgt aaaccctgta atctagtaat      300
262 ctgtacaata ataattttgt ttcaactaag aggatgttgg caaaagtata attaaacttg      360
264 tgatcttcgt acaataatta tgcttcacgc actcaactag tcacatcttt ccaggcaaaa      420
266 tttacttttc tatgaatatg agaagttcca tctatggaaa taacggatta tttatctaatt      480
268 tttcaaattc tatatatata gtctcgagtg gaacaaaaat agaactaatt tgaacaaatc      540
270 aaagtctaag aaaataatac atgcttttagc agcaaaaaata agaatggtac tatacttaat      600
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274 ttaatttagt catgataata caactcacct actcatttat agccgataat acaactcacc      720
276 tagctactcc attatagtcc aacaatatca aatgaataaa atagtaatgg tgacttaaag      780
278 ggctgaatcc aacatatatt ctgacattta aaaatgctaa cgtacgggta gattagtata      840
280 atgaaataaa gttaatcatt ctctatattt gatgatggta attagtatca tggttaagggtg      900
282 ttttatcgtg gcagcatgag tgcatgacaa acgcatatat tattattaaa acaaaatagt      960
284 actccaatca taataaatta tcttatatta tattgccaac aattaaaaat tcaaattaga     1020
286 acaaattaaa tctcagtttg ctttattata ttattatcaa caataataat ttaatactga     1080
288 tcgaagaact ttccctttca agttctctat ttaaggaagc ctgagaagcc attaatcctc     1140
290 atcatcagct cgaccactca tttcttcttc atacttcctt tgctgtgata atcatcatc     1199
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294 <211> LENGTH: 1467
295 <212> TYPE: DNA
296 <213> ORGANISM: Ipomoea batatas
298 <220> FEATURE:
299 <221> NAME/KEY: promoter
300 <222> LOCATION: (1)..(1467)
301 <223> OTHER INFORMATION: -1467 deletion promoter
304 <400> SEQUENCE: 9
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307 atactactcc aaaaatttat aaattttttat ggtagcttct acacttatag aactacatgt      120
309 ataaaaaata ttgggtcaaa ataccttacc gatttttccc aaatattcac ggaacttact      180
311 gccagaatct accctgcttt ttcttttcac tatttttcaca actataagca tatatgggca      240
313 taaatatgac atgaacatgc atgaaccaat gcagggtgaa agtaagattg aatatactga      300
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323 aattatgtaa accctgtaat ctagttaatct gtacaataat aattttgttt caactaagag      600
325 gatgttggca aaagtataat taaacttgtg atcttcgtac aataattatg cttcacgcac      660
327 tcaactagtc acatctttcc aggcaaaatt tacttttcta tgaatatgag aagttccatc      720
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335 cacttaacat tttatattca aatatacttt aatttagtca tgataatata actcacctac 960
337 tccattatag ccgataatac aactcaccta gctactccat tatagtccaa caatatcaaa 1020
339 tgaataaaat agtaatgggtg acttaaagggt ctgaatccaa catatattct gacattttaa 1080
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347 ttgccaaaca ttaaaaattc aaattagaac aaattaaatc tcagtttgct ttattatatt 1320
349 attatcaaca ataataattt aatactgagc gaagaacttt ccctttcaag ttctctattt 1380
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358 &lt;212&gt; TYPE: DNA

359 &lt;213&gt; ORGANISM: Ipomoea batatas

361 &lt;220&gt; FEATURE:

362 &lt;221&gt; NAME/KEY: promoter

363 &lt;222&gt; LOCATION: (1)..(1934)

364 &lt;223&gt; OTHER INFORMATION: -1934 deletion promoter

367 &lt;400&gt; SEQUENCE: 10

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374 tctccaaata tccaaatgga aggtttcaac ttccaaacta ataccaaacc aaccggacta 240
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VERIFICATION SUMMARY

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